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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Helmut Jerg

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BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

OSTERHOUT, BENJAMIN LEE

ART UNIT

PAPER NUMBER

1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,230	Applicant(s) JERG ET AL.	
	Examiner BENJAMIN OSTERHOUT	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 10 and 13-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the valves of claims 22 and 23 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10 and 13-23 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application Publication No. 358279 A1 to Fried et al.

Regarding claim 10, Fried et al. discloses a dishwasher with a rinsing container (Fig 1, part 1); a spraying system using rinsing water (not shown in the Figures; machine translation, page 2, ll. 5-6, “A rinsing container...”); and a double walled drying container connected outside of the rinsing container, the container filled with a desiccant that is reversibly dehydratable (machine translation, page 2, ll. 6-8, “Around the instantaneous...”; machine translation, page 1, ll. 5, “regeneratable by heating...”), air is circulated through the dishwasher wherein the dry air takes up moisture and is dried again by the drying container (machine translation, page 2, ll. 15-18, “In the drying container...”) which the drying step is indicated to occur after some rinsing step (machine translation, page 1, ll. 8-9, “Afterwards the hot rinsing...”), and the heating element which dries the desiccant is also used to heat the rinsing water (machine translation, page 2, ll. 6-8, “Around the instantaneous...”; machine translation, page 2, ll. 21-23, “With the next start-up...); see also Fig. 2, parts 7 and 3, drying container and instantaneous water heater respectively).

Regarding claim 13, Fried et al. teaches a double walled drying container filled with desiccant (machine translation, page 2, ll. 6-8, "Around the instantaneous...") that is capable of being renewed by the heater thereby giving up moisture for the next rinsing cycle (machine translation, page 2, ll. 21-23, "With the next start-up...; machine translation, page 1, ll. 5, "regeneratable by heating..."). This claim is treated as though it depends from claim 12.

Regarding claims 14-15, Fried et al. teaches that the electric heater is preferably an electric instantaneous water heater (machine translation, page 1, ll. 3) and that the heater is located in the pipe which goes to the drying container, more so Fried et al. teaches that the electric heater is surrounded by the drying container with desiccant (see Fig. 2, parts 3 and 7; machine translation, page 2, ll. 6-7, "Around the instantaneous..."). These claims are treated as though they depend from claim 12.

Regarding claim 16, Fried et al. may not teach that the air that exits the inlet pipe (blow-out port, Fig. 1, part 9) is cooled. However, basic thermodynamics teaches that as an adiabatic gas expands, it cools. When the air exits the pipe, it will naturally cool.

Regarding claim 17, Fried et al. teaches that the inlet pipe (blow-out port, Fig 1, part 9) extends up into the rinsing container and has a cap-like cover (Fig. 1, part 10) to keep out water (see Fig 1, part 9 and 10; machine translation, page 1, ll. 48-52, "Since the air circulations..."). This claim is treated as though it depends from claim 12.

Regarding claim 18, Fried et al. teaches that the mechanism for heating is that of a latent heat storage (machine translation, page 1, ll. 20-21, "To the avoidance...") wherein the water desorbed from the desiccant is heated and reused as rinsing water

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(machine translation, page 2, ll. 21-23, "With the next start-up..."). This claim is treated as though it depends from claim 12.

Regarding claim 19, the claim language concerning "during a partial program step using rinsing liquid to be heated, air from the washing container and/or from the ambient air is passed through the sorption column and into the washing container" is considered as intended use, does not provide further structural limitations to the claim language, and will not be given patentable weight. Furthermore, it is noted that the apparatus of Fried et al. is capable of performing said intended use.

Regarding claim 20, the claim language concerning "during a partial program step 'drying; air from the washing container and/or from the ambient air is passed through the sorption column and into the washing container" is considered as intended use, does not provide further structural limitations to the claim language, and will not be given patentable weight. Furthermore, it is noted that the apparatus of Fried et al. is capable of performing said intended use.

Regarding claim 21, Fried et al. teaches the steps of washing the dishes with detergent, rinsing with water, and then drying the dishes (machine translation, page 1, ll. 7-9, "After conclusion of this.."). Furthermore, Fried et al. teaches that during the drying step air is circulated from the dishwasher to the drying container, through the desiccant which is reversibly dehydratable, and back to the dishwasher (machine translation, page 2, ll. 15-18, "In the drying container..."; machine translation, page 1, ll. 5, "regeneratable by heating..."). Fried et al. further teaches that the drying container and desiccant are subjected to a heating step wherein desorption occurs and the heated water recovered

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is used as rinsing water (machine translation, page 2, ll. 21-23, "With the next start-up...; machine translation, page 1, ll. 5, "regeneratable by heating..."). Fried et al. further teaches that the rinsing container has an outlet pipe to the drying container (see Fig. 1, the pipe not labeled running between parts 14 and 13). Fried et al. also teaches that the rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container..."). Fried et al. also teaches that the outlet pipe has a fan to suck in air from the rinsing container located just before the drying container and desiccant (see Fig. 1, part 13; machine translation, page 2, ll. 9-10, "Over the terminal..."; machine translation, page 2, ll. 14-15, "Now if the fan 13...").

Regarding claim 22, Fried et al. also teaches that the rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container...") comprising a pipe (Fig. 1, part 9) that has an outlet (inherent, see Fig. 1, part 9) with a one way valve (cap-like closure, Fig. 1, part 10, see machine translation, claims 11 and 12).

Regarding claim 23, Fried et al. also teaches that the rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container...") comprising an inlet valve (Fig. 1, part 14, machine translation, claim 10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application Publication No. 358279 A1 to Fried et al. in view of U.S. Patent No. 5,343,632 to Dinh.

Regarding claim 16, Fried et al. is relied upon as above in claim 10. Fried et al. may not teach that the air introduced into the washing container via the inlet is cooled.

Dinh teaches a closed-loop drying system (col. 3, ll. 13-15) which may be used in a dishwasher (col. 8, ll. 8-10) wherein a cooler/condenser (col. 7, ll. 32-36) is used to cool the humid air in order to further remove moisture from the air before the air is recirculated (col. 7, ll. 58-66).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dishwasher drying system of Fried et al. with the

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cooler/condenser of Dinh in order to cool the air so that even more moisture may be removed from the air before it is recirculated.

Examiner's Response to Arguments

7. Regarding the rejections to the claims and the 35 USC 112, 2nd paragraph, Applicant through amendment has corrected said rejections, therefore said rejections are obviated.

Regarding the drawings, since Applicant included new claims 22 and 23, the drawings are now objected to for not showing the features of the valves of said claims.

Regarding Applicant's response to claim 10, Examiner has carefully review Applicant's argument; however, Examiner is not persuaded by said arguments. Applicant should note that the claim language in claim 10 regarding "with the thermal energy being at least partly used for at least one of heating the rinsing solution in the washing container and heating the crockery" should be regarded as intended use, does not provide further structural limitations to the claim, and should not be given patentable weight. Furthermore the apparatus of Fried et al. is fully capable of heating either the crockery or the rinsing water. First with regards to page 8 of Applicant's response, Applicant clearly notes that Fried et al. teaches that the desiccant which is in the sorption column is heated in order to dehydrate the desiccant and the water (which has been heated) is returned to the container to act as rinsing water. Furthermore it is noted that the apparatus of Fried et al. is not adiabatic, any heating that occurs will transmit to

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heating the surrounding environment, therefore the ware in the dishwasher will be heated and any rinsing water will also be heated.

Regarding Applicant's response to claim 16, Dinh clearly teaches a cooler/condenser. Applicant's argument does not fully address said rejection, only noting that Dihn does not address the deficiencies of Fried et al. with regards to claim 10. However, Examiner has addressed said arguments therefore Examiner is not convinced and thus sustains all prior rejections.

Regarding the amendments made by Applicant, any changes in dependency with regards to the forgoing rejections was necessitated by amendment as well all other changes to the original rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN OSTERHOUT whose telephone number is (571)270-7379. The examiner can normally be reached on Monday-Thursday 8:30am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

/BLO/

Benjamin L. Osterhout
14 August 2009